

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-27. (canceled)

28. (currently amended) A device for regulating the mass of glass gobs used to produce hollow glass containers in an individual section glass forming machine, the individual section glass forming machine having two or more sections each comprising at least one preform station such that each preform station is capable of processing glass gobs of a weight different from those in another preform station so that glass containers of different weights can be made, wherein the glass forming machine operates on a cyclic basis in which one glass gob is provided to each preform station, and wherein ~~so that~~ the individual section glass forming machine can ~~simultaneously~~ produce an assortment of the hollow glass containers of different weights in each cycle, the device comprising:

a feeder having a feeder head capable of discharging molten glass that forms the glass gobs provided to the preform stations;

at least one plunger disposed in the feeder head, said at least one plunger being moveable upward and downward in the feeder head in accordance with a changeable plunger movement profile, each said plunger having a said changeable plunger movement profile associated with one for each preform station of each of said sections of the glass forming machine such that each plunger has as many said changeable plunger movement profiles as

there are sections, wherein the movement of the at least one plunger influences a mass of the molten glass discharged from the feeder head;

means for determining mass reference value differences for the glass gobs, the mass reference value difference for each of the glass gobs being determined from a reference desired value and a measured actual value of the mass of the glass gob for each preform station of each section; and

a control unit in communication with the means for determining said mass reference value difference, the control unit being configured to (i) change each changeable plunger movement profile and which is configured to control the movement profile of the plunger for each subsequent gob based on the mass reference value difference for each the preform station associated therewith of each section and (ii) implement the changed movement profiles during a subsequent cycle so that the measured actual mass values of subsequently-formed glass gobs are made to approximate the reference desired mass value in a stepwise manner.

29. (currently amended) The device of claim 28, wherein ~~the individual section glass forming machine operates on a cyclic basis~~; the control unit determines after each cycle for each preform station whether the mass reference value difference of the glass gob produced during the cycle is greater than a threshold value; and if the mass reference value difference is determined to be greater than the threshold value, the plunger movement profile is adjustable for the subsequent cycle.

30. (previously presented) The device of claim 28, wherein the control unit changes the movement profiles of the plunger by changing one or more parameters selected from the group including: a standstill period for the plunger in a lower and/or upper end position of the plunger; a duration of the downward and/or upward movement of the plunger; a speed structure of the downward and/or upward movement of the plunger; a stroke of the plunger; and a position of the plunger in relation to an orifice ring of the feeder head during the stroke of the plunger.

31. (previously presented) The device of claim 28, wherein the device further comprises at least one plunger holder that extends substantially in a horizontal direction; the movement profile of the plunger is determined by a data record for a movement profile for the plunger holder; and the data record is stored in the control unit.

32. (previously presented) The device of claim 31, wherein the device further comprises a second plunger, the plungers are attached to the plunger holder, and the control unit is a drive controller of the plunger holder.

33. (previously presented) The device of claim 31, wherein the device further comprises a second plunger and a height adjusting device for moving the second plunger in relation to the plunger holder; and a data record for a movement profile for the second plunger in relation to the plunger holder is stored in an associated drive controller.

34. (currently amended) The device of claim 28, wherein:

the feeder head comprises a restrictor pipe that surrounds the at least one plunger;

the device further comprises a control circuit for compensating for the effects of changes in the viscosity of the molten glass or changes in the level of the molten glass in the feeder head on the mass of the glass gobs by controlling an axial position of the restrictor pipe;

~~the individual section glass forming machine operates on a cyclic basis;~~

following each cycle of the individual section glass forming machine, the device determines a mean value of the mass reference value differences of all of the glass gobs produced during the cycle, and the device changes the axial position of the restrictor pipe prior to the subsequent cycle so that the mass reference value differences approximate zero during the subsequent cycle; and

following each cycle of the individual section glass forming machine, the device scales the mass reference value differences of all of the glass gobs produced during the cycle to produce a fictitious mean value of zero, and the device changes the movement profile of the plunger based on the scaled mass reference value differences.

35. (previously presented) The device of claim 30, wherein the device further comprises at least one plunger holder that extends substantially in a horizontal direction; the movement profile of the plunger is determined by a data record for a movement profile for the plunger holder; and the data record is stored in the control unit.

36. (previously presented) The device of claim 35, wherein the device further comprises a second plunger, the plungers are attached to the plunger holder, and the control unit is a drive controller of the plunger holder.

37. (previously presented) The device of claim 35, wherein the device further comprises a second plunger and a height adjusting device for moving the second plunger in relation to the plunger holder; and a data record for a movement profile for the second plunger in relation to the plunger holder is stored in an associated drive controller.

38, 39. (canceled)